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MICHAEL P. MORRIS			LEITH, PATRICIA A	
BOEHRINGER INGELHEIM CORPORATION 900 RIDGEBURY ROAD			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)		
Office Action Summary		10/743,170	ESPERESTER E	ESPERESTER ET AL.	
		Examiner	Art Unit		
		Patricia Leith	1655	f	
Period fo	The MAILING DATE of this communication apports.	pears on the cover sheet with the	correspondence ac	ldress	
WHIC - External after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING Donsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. mely filed n the mailing date of this c ED (35 U.S.C. § 133).	,	
Status	•				
1)⊠ 2a)□ 3)□	Responsive to communication(s) filed on <u>21 S</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for alloward closed in accordance with the practice under E	action is non-final. nce except for formal matters, pr		e merits is	
Dispositi	ion of Claims	,			
5)□ 6)⊠ 7)□ 8)□ <b>Applicat</b> (	Claim(s) 1-28 is/are pending in the application 4a) Of the above claim(s) 17-28 is/are withdraw Claim(s) is/are allowed. Claim(s) 1-16 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or ion Papers The specification is objected to by the Examine The drawing(s) filed on 22 December 2003 is/a Applicant may not request that any objection to the	vn from consideration.  r election requirement.  er.  nre: a)⊠ accepted or b)□ object drawing(s) be held in abeyance. Se	ee 37 CFR 1.85(a).		
11)□	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex		-	* *	
	under 35 U.S.C. § 119	dammer. Note the attached Office	# ACION OF IOINI P	10-152.	
12)⊠ a)l	Acknowledgment is made of a claim for foreign All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	tion No red in this National	Stage	
2) 🔲 Notic 3) 🔲 Infori	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:		O-152)	

#### **DETAILED ACTION**

Claims 1-28 are pending in the application.

### Election/Restrictions

Applicant's election of Group I, claims 1-16 in the reply filed on 9/25/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 17-28 are hereby withdrawn from examination on the merits as they are directed toward a non-elected invention.

Due to the confusion brought about by the original election of species requirement, this requirement is hereby removed.

Claims 1-16 were examined on their merits.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 6, 7, 9, 11, 13 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites 'the dried aqueous extract' which lacks antecedent basis in claim

1. The claim has been treated on the merits as if it properly limits claim 1 to an aqueous extract.

Claims 6, 7, 9, 11, 13 and 15 all recite 'according to one of claims 1 to 5'. It cannot be determined what claim Applicant intends for these to depend upon. It is suggested that the claims be amended to read 'according to any one of claims 1-5' in order to avoid confusion. Correction is necessary.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4 and 6 –16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1-4 and 6 –16 and 14 either recite, or depend upon a claim which recites 'extract of red vine leaves'. It is deemed that Applicant has not set forth a representative number of examples in order to reasonably verify possession of such a potentially enormous number of extracts.

The MPEP states that written description for a genus can be achieved by a representative number of species within a broad generic. It is unquestionable that the claims are broad generics, with respect to *all* extracts. The possible variations of extracts are limitless. Applicant has disclosed an aqueous extract of red vine leaves. This disclosure is actually a *very few* number in comparison to the enormous, *potentially millions* of types of extracts which could be obtained from red vine leaves. The reason for this large amount of permutations is because extraction techniques are often coupled in order to obtain a product; for example

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- 1) a water extraction followed by an alcoholic extraction: the product obtained is an extract.
- 2) a supercritical extraction (CO<sub>2</sub>) followed by an alcoholic and then a non-polar solvent extraction (e.g., chloroform): the product is an extract.
- 3) a benzene extraction followed by a water extraction and chromatographic separation: the product is an extract.
- 4) a water/chloroform extraction (e.g., in a seperatory funnel), followed by collection of the water layer, chromatographic separation and crystallization of an isolate: the product is an extract.
  - 5) squeezing the plant to obtain a juice: the product is an extract.
- 6) dipping the plant in an organic solvent to remove the waxy layer: the product is an extract.

The MPEP states that the purpose of the written description requirement is to ensure that the invention had possession, as of the filing date of the application, of the specific subject matter later claimed by him or her. The courts have stated:

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"To fulfill the written description requirement, a patent specification must describe an invention and do so in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention." Lockwood v. American Airlines, Inc., 107 F. 3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997); In re Gostelli, 872 F. 2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989) ("[T]he description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed."). Thus, an applicant complies with the written description requirement "by describing the invention, with all its claimed limitations, no that which makes it obvious," and by using "such descriptive means as words, structures, figures, diagrams, formulas, etc., that set forth the claimed invention." Lockwood, 107 F. 3d at 1572, 41 USPQ2d at 1966." Regents of the University of California v. Eli Lilly & Co., 43 USPQ2d 1398. The specification lacks sufficient variety of species of extracts to reflect this variance in the genus since the specification does not provide sufficient examples of such a genus of extracts.

The description requirement of the patent statue requires a description of an invention, not an indication of a result that one might achieve if one made that invention. See *In re Wilder*, 736, F. 2d 1516, 1521, 222 USPQ 369, 372-73 (Fed. Cir. 1984) (affirming rejection because the specification does "little more than outline [goals] appellants hope the claimed invention achieves and the problems the invention will hopefully ameliorate.") Accordingly, it is deemed that the specification fails to provide

adequate written description for the genus of 'extract' and does not reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed had possession of the entire scope of the claimed invention and thus, this rejection is proper.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Ables, E (US 3,136,693).

Ables, E (US 3,136,639) disclosed a coated tablet comprising atomized red vine extract in combination with excipients such as magnesium stearate and lactose (col. 7, Example 3). It is noted that the ratio of extract to excipients was 1:1; thus, the excipient

was 50% of the weight of the composition. The composition of Ables was "granulated when dry".

extract of red vine leaves has been produced in a drying process comprising the step of adding at least a proportion of the excipient during the drying process' would not materially change the composition. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Here, it is deemed that the product would be the same whether the drying process had begun and the excipients were added, or alternatively, if the excipients were added together with the extract and then dried and granulated.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Esperester et al. (US 6,485,727 B1).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

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under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Esperester et al. (US 6,485,727 B1) disclosed a tablet comprising 1-50% of an aqueous red vine leaf extract (see claims 1-8). Further, Esperester et al. specifically disclosed wherein the excipients were added to the red vine extract during the drying process (see col.3, lines 25-37).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

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Claims 1-16 are rejected under 35 U.S.C. 103(a) as being obvious over Esperester et al. (US 6,485,727 B1) in view of Struengmann (US 6,284,269).

The teachings of Esperester et al. (US 6,485,727 B1) were discussed *supra*. Although Esperester et al. specifically suggested the incorporation of carriers/excipients, Esperester et al. did not specifically teach wherein the tablet contained a disintegrant such as colloidal, anhydrous silica, a binder such as microcrystalline cellulose, a filler such as hydrogen phosphate or magnesium stearate, a plasticizer, a colorant or the particular amounts of each constituent in the tablet.

Struengmann (US 6,284,269) disclosed conventional tablet additives such as hydrogen phosphate, colloidal anhydrous silica, sodium starch, magnesium stearate, microcrystalline cellulose (see example V/7, col's 10-11) as well as plasticizers such as polyethylene glycol (see claim 10). Thus, it was known that all of the tablet ingredients as Instantly claimed were conventional tablet ingredients, known at the time the invention was made.

It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F2d 454,456,105 USPQ 233; 235 (CCPA 1955). see MPEP § 2144.05 part II A.

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to determine all operable and optimal concentrations of components because concentration is an art-recognized result-effective variable which would have been routinely determined and optimized in the pharmaceutical art. Further, if there are any differences between Applicant's claimed method and that suggested by the combined teaching of the prior art, the differences would be appear minor in nature. Although the prior art do not teach the particular combination of carriers which are added to the red vine extract or all the various permutations of concentration ranges as claimed, it would be conventional and within the skill of the art to identify the optional concentrations of a given excipient because (1) the selection of appropriate concentration of excipients to stabilize red vine extract for the intended purpose of preventing its denaturation and decomposition during storage are conventional and within the skill in the art, and (2) hydrogen phosphate, colloidal anhydrous silica, sodium starch, magnesium stearate, microcrystalline cellulose and polyethylene glycol are well known in the art as excipients to used for tableting active ingredients.

Claims 1-4 and 6-16 are rejected under 35 U.S.C. 103(a) as being obvious over Ables, E (3,136,693) in view of Struengmann (US 6,284,269).

The teachings of Ables, E (3,136,693) were discussed *supra*. Ables did not specifically teach wherein the tablet contained a disintegrant such as colloidal,

anhydrous silica, a binder such as microcrystalline cellulose, a filler such as hydrogen phosphate or magnesium stearate, a plasticizer, a colorant or the particular amounts of each constituent in the tablet.

The teachings of Struengmann (US 6,284,269) were discussed *supra*. To reiterate, Struengmann (US 6,284,269) disclosed conventional tablet additives such as hydrogen phosphate, colloidal anhydrous silica, sodium starch, magnesium stearate, microcrystalline cellulose (see example V/7, col's 10-11) as well as plasticizers such as polyethylene glycol (see claim 10). Thus, it was known that all of the tablet ingredients as Instantly claimed were conventional tablet ingredients, known at the time the invention was made.

It would have been obvious to one of ordinary skill in the art at the time

Applicant's invention was made to determine all operable and optimal concentrations of components because concentration is an art-recognized result-effective variable which would have been routinely determined and optimized in the pharmaceutical art.

Further, if there are any differences between Applicant's claimed method and that suggested by the combined teaching of the prior art, the differences would be appear minor in nature. Although the prior art do not teach the particular combination of carriers which are added to the red vine extract or all the various permutations of concentration ranges as claimed, it would be conventional and within the skill of the art to identify the optional concentrations of a given excipient because (1) the selection of

appropriate concentration of excipients to stabilize red vine extract for the intended purpose of preventing its denaturation and decomposition during storage are conventional and within the skill in the art, and (2) hydrogen phosphate, colloidal anhydrous silica, sodium starch, magnesium stearate, microcrystalline cellulose and polyethylene glycol are well known in the art as excipients to used for tableting active ingredients.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

No Claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia Leith whose telephone number is (571) 272-0968. The examiner can normally be reached on Monday - Thursday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on (571) 272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia Leith Primary Examiner Art Unit 1655

11/21/05